

## Claims

1. A tubular product comprising at least three  
5 layers, a base layer, an innermost layer made of plastic  
by continuous extrusion, the base layer and the innermost  
layer having poor adhesion to each other, and a tie layer  
between the base layer and the innermost layer,  
c h a r a c t e r i z e d in that the tie layer is of  
10 foamed material at least in one intermediate layer.

2. A tubular product according to claim 1,  
c h a r a c t e r i z e d in that the base layer consists  
of the soil in the ground.

3. A tubular product according to claim 1,  
15 c h a r a c t e r i z e d in that the base layer is made  
of metal of plastic-coated metal.

4. A tubular product according to claim 3,  
c h a r a c t e r i z e d in that the base layer  
comprises radial grooves or ribs.

20 5. A tubular product according to any one of the  
preceding claims, c h a r a c t e r i z e d in that the  
inner surface of the base layer is rough which is  
smoothened by the foamed tie layer and that the inner  
surfaces of the tie layer and innermost layer are  
25 substantially smooth.

6. A tubular product according to any one of the  
preceding claims, c h a r a c t e r i z e d in that the  
tie layer contains of fine filling agent.

30 7. A tubular product according to any one of the  
preceding claims, c h a r a c t e r i z e d in that the  
inner layer of the product is made of oriented plastic.

8. A tubular product according to any one of the  
preceding claims, c h a r a c t e r i z e d in that the  
tie layer comprises oriented foam bubbles.

35 9. A tubular product according to any one of the  
preceding claims, c h a r a c t e r i z e d in that the  
innermost layer and/or the tie layer is cross-linked  
polyethylene.

40 10. A tubular product according to any one of the  
preceding claims, c h a r a c t e r i z e d in that the

tie layer consists of grafted polyethylene.

11. A tubular product according to any one of the preceding claims, c h a r a c t e r i z e d in that the product is joined together with another similar product by  
5 means of a cross-linked plastic sleeve (27) that has a diameter compressed to a smaller size than normally.

12. A tubular product according to any one of claims 1 to 10, c h a r a c t e r i z e d in that the product is joined together with another similar product by  
10 means of a sleeve (28) situated inside the joint and a clamping collar (29) situated outside the joint.

13. An extrusion apparatus comprising means for extruding a multilayer parison comprising at least an inner plastic layer and a tie layer  
15 c h a r a c t e r i z e d in that the tie layer is of foamed material and that the apparatus is arranged inside a tubular base layer and comprises an expanding madrel for forcing the inner layer and the tie layer of foamed material against the base layer.

20 14. An extrusion method wherein a multilayer parison comprising at least an inner plastic layer and a tie layer is extruded, c h a r a c t e r i z e d in that the tie layer is of foamed material and that the plastic layer and the tie layer of foamed material are extruded  
25 inside a tubular base layer and forced against the base layer by an expanding mandrel.